

BULLETIN

of the

TASMANIAN FIELD

NATURALISTS' CLUB

President - Mrs. Stephens

Secretary - Miss A. Cooper

Treasurer - Mr. L. Wall

TASMANIAN FIELD NATURALISTS

CLUB

Box 68A G. P. O. HOBART.

Registered at the General Post Office,  
HOBART, for transmission by post as a periodical.

NEXT MEETING

The next meeting of the Club will be held in the Royal Society's room in the Tasmanian Museum, on March 16th at 7.45 p.m.

Mr. L. E. Wall will give an address entitled, "Duck Identification."

EASTER CAMP

The above camp will be held at Lake Fenton, from 24th to 28th March, 1967. To enable arrangements to be finalised it is necessary to have names of all intending to attend, in the hands of the Camp Committee, by the closure of the above meeting. It is desired that all applications be made in writing and either handed to the Secretary at the meeting or posted to G.P.O. Box 68A Hobart, which will be cleared at noon on the 16th inst. No applications can be received after this date.

Bunks and mattresses are provided in the huts, but bring your own food and warm clothing, for it can be cold.

Some cooking utensils, and cutlery are provided, but to be on the safe side bring what you are likely to need. The hiring fee for the huts will depend on the number using them.

Any person requiring transport please signify on their application and any person who can offer transport please do likewise. Mr. K. Aves has kindly offered to answer any questions regarding the Easter Camp, his phone number is 34.3831.

BIRD OBSERVERS GROUP

The meeting of the above will be held at 147 Liverpool St., at 8 p.m. on Friday, ~~17th~~ inst. The speaker will be Mr. J. H. Hemsley, Curator of Wildlife. Visitors welcome.

31st

SUBSCRIPTIONS

Subscriptions are now due. The Committee has found it necessary to raise the fees to enable them to continue, rent is our main expense and this is per year. Subs. have been fixed at the following

Married Couples	\$3. 50 <del>per head</del>
Ordinary Membership	\$2. 50 <del>per year</del>
Junior "	\$1. 00 <del>per head</del>

ANIMALS AND BIRDS PROTECTION BOARD

The Board would like to increase the knowledge of waterfowl populations of the State. To do this, the cooperation of many people is needed to make regular repeated counts of water fowl in selected waters. will be advised at meeting, 16th inst.

HOBART WALKING CLUB

An Easter trip has been planned to Lake Tahoe effort to replant a little of the area before the washes away. Any members interested in joining the party, can obtain further information from the Sec

A steamer cruise has been arranged to South B April 1st - 2nd. Adult fares \$4. 00 Details will be advised at meeting on Thursday, 16th.

Anne Cooper Hon.

Bulletin

of the

TASMANIAN FIELD NATURALISTS'

CLUB

Registered at the G.P.O. as  
HOBART, for transmission by  
post as a periodical.

Mr. & Mrs. L.E. Wall.  
63 Elphinstone Road,  
NORTH HOBART, TAS.

BULLETIN

of the

TASMANIAN FIELD

NATURALISTS' CLUB

President - Mrs. T.L. Stephens, 11 Hazell Street,  
Blackmans Bay.

Secretary - Miss A. Cooper, 48 Creek Rd., New Town

Treasurer - Mr. L. Wall, 63 Elphinstone Rd., Mount Stuart.

Registered at the General Post Office, HOBART,  
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T ASMANIAN FIELD NATURALISTS' CLUB OF TASMANIA.

G.P.O. BOX 68 A., HOBART.

BULLETIN NO. 114.

APRIL, 1967.

NEXT MEETING.

The next meeting of the Club will be held in the Royal Society's Room in the Tasmanian Museum, on the 20th April, 1967 commencing at 7.45 p.m.

Prof. Jackson will be the speaker at this meeting and he will give an outline of the activities enjoyed at the Easter Camp.

NEXT OUTING.

Mr. K. Aves will lead the next outing of the Club, to be held on the 22nd of April, 1967. Members and friends wishing to take part in the outing are asked to assemble at the Pioneer Bus terminus, 96 Harrington St., Hobart, at 10.45 a.m. to catch the 'bus to Blackmans Bay departing at 11 a.m. The Party will alight at the Blackmans Bay terminus. It is planned to return home by the 4.10 p.m. 'bus.

EASTER CAMP.

About 20 members attended the Easter Camp at Lake Dobson. A distinguish member of the party was Prof. Jackson, who gave valuable help in the collection and classification of botanical specimens.

On Sunday evening members gathered in the Telopea Hut, and during the campfire sing-song many old Club songs were revived. One song of interest was the Club song "Field Nats are We" sung to the tune of "The King's Highway".

OFFICE BEARERS FOR 1967.

President.

Mrs. T.L Stephens.

Vice Presidents.

Messrs. Bennett & Aves.

Hon. Secretary.

Miss. A. F. Cooper.

Hon. Asst. Secretary.

Miss. P. Webster.

Hon. Treasurer.

Mr. L.E. Wall.

Hon. Auditor.

Miss. R. Warren

Committee.

Sister Warren, Messrs.  
M. Sharland, M. Hurburgh,  
D. Thomas, J. Mangini.

Annie Cooper  
Hon. Secretary.

Bulletin

of the

TASMANIAN FIELD NATURALISTS' CLUB

Registered at the G.P.O. HOBART, for  
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TASMANIAN FIELD

NATURALISTS' CLUB

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Registered at the General Post Office, HOBART,  
for transmission by post as a periodical.

G.P.O. BOX 68A. HOBARTBULLETIN NO. 115.MAY, 1967NEXT MEETING.

The next meeting of the Club will be held in The Royal Society's Room, Tasmanian Museum, Hobart, on the 18th May, 1967, commencing at 7.45 p.m.

Prof. W.D. Jackson, lecturer in Botany at the Tasmanian University will speak on "Native Flora".

NEXT OUTING

Mrs. Stephens will lead this outing to "Bowen Park" Risdon. It is hoped to combine the shore line with the bushland on this excursion.

Members and friends wishing to take part on this outing are asked to meet at the Prince Theatre, Macquarie St., at 10.30 a.m. on Saturday, 20th May, 1967. Private transport. Water is available to anyone wishing to boil the billy.

SUBSCRIPTIONS

Oh, yes friends, just one small matter - Subs!! These are now due and could we possibly have a 100% payment by the end of the Financial Year?

Adults	\$2. 50
Juniors	\$1. 00
Married Couples	\$3. 50

Our treasurer will gladly receive these at the May Meeting or payment may be made by post to the above address.

BIRD OBSERVATION GROUP

The next meeting of the above will be on Friday, the 26th May, 1967, in the Wireless Institute Room, 147 Liverpool St., (Fletcher Jones' Building).

Mr. J.R. Napier will show slides of Tasmanian Birds.  
Visitors Welcome.

LOST HOMING PIGEONS      Australian Natural History Vol.15 No.9

The Division of Wildlife Research, C.S.I.R.O. seeks the co-operation of 'Australian Natural History' readers in its study of the fate of lost homing pigeons, as part of an investigation of the biology of pigeons.

The Division states: "During long-distance races many pigeons fail to return home. Some become exhausted because of bad weather, others meet with an accident or are taken by predators. When one of these birds is found, we would appreciate a letter advising us of the inscription on the leg band and of the date, time, location and circumstances in which the pigeon was found.

"If the bird is still alive, it should be allowed to rest, feed, and drink whereafter it may continue on its way home. If it fails to survive, or is already dead when found, the band should be attached to the letter.

"We will use the information on the band to trace the owner and to find out from him the pigeon's last point of release. Analysis of the fate of many lost and stray homing pigeons will give us a better understanding of the hazards they face and of the methods they use to navigate."

Annie Cooper  
Hon. Secretary.

Bulletin  
of the  
TASMANIAN FIELD NATURALISTS' CLUB

Registered at the G. P. O. HOBART, for  
transmission by post as a periodical.

TASMANIAN FIELD NATURALISTS' CLUB BULLETIN NO.116.

(Registered at The G.P.O. Hobart for transmission by post as a periodical)

PRICE, 40¢

JUNE, 1967.

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President - Mrs. T.L. Stephens, 11 Hazell St., BLACKMANS BAY.  
Secretary - Miss. A.F. Cooper, 48 Creek Rd., NEW TOWN.  
Treasurer - Mr. L.E. Wall, 63 Elphinstone Rd., NORTH HOBART.

ooo 000 ooo

NOTICE OF MEETING.

The next meeting of the above Club will be held in the Royal Society's Room, Tasmanian Museum, Hobart on the 15th, June, 1967 commencing at 7.45 p.m.

SPEAKER.

Mr. Henk Meerding, a person interested in bushwalking and prospecting will speak on growing Tasmanian Orchids in Glass Houses and also on the Weld River Country.

NEXT OUTING.

Met at the Sandy Bay Bus terminus at 10.30 a.m.  
For persons wishing to travel by bus from Hobart, the bus leaves Franklin Square at 10. a.m. Mr. M. Hurburgh will lead this outing to Blinking Billy Point on Saturday the 17th June, 1967, to search for fossils.

TASMANIAN FIELD NATURALISTS' CLUB BULLETIN.

No/ 116.

June, 1967.

SOUTH WEST COMMITTEE.

We all know that with a slide evening has been arranged by the . . . Committee for Monday the 19th June, 1967, to be held in the Hobart Town Hall.

This evening is designed to give the public some idea of what is involved in the proposed flooding of Lake Pedder by the H.F.C. and also the South West Committee's campaign for a large national park.

It is hoped that as many Field Nats as possible will attend.


TREASURER'S NOTE.

There appears to be some uncertainty ~~among~~ members regarding the method of allocation of annual subscriptions. A single adult member pays 20cents per year for the "Tasmanian Naturalist", it's normal expenses - a total of \$2.50.

For married couples only on Bulletin and one "Tas. Naturalist" are supplied, and \$2.90 is contributed to the Club's General Funds. The total payment is \$3.50

If members wish to make a subscription to the "Tas. Naturalist" which is to be forwarded to a friend, the annual charge is 40 cents. The Treasurer should be given the address to which the paper is to be forwarded at the time such a payment is made.

SUBSCRIPTIONS.

At the bottom of this page there is a little square. The red cross in it has been placed there by your Treasurer as a reminder that your Sub. is now due. 

The Treasurer will have the Club's receipt book at the next meeting and will gladly receive SUBS!!!!!!

NOTES FROM THE COMMITTEE MEETING.

A prize has been donated by a friend of the Club for a junior member (under the age of 16 years at the end of the current year) showing the most interest in Natural History. In school work and sport it is very difficult for young people to attend Club meetings and outings, but the committee has decided that this prize may be awarded to any young person for a project on Natural History of their own choosing.

The project is to be written, but may be of the writer's own observations, or may be a study from literature on any favourite subject.

OUTINGS.

Your Committee would be grateful for your views on this subject. This was discussed and points for and against were raised regarding Sunday Outings.

FOR.

Young people could attend.

Parents, on Saturdays like to attend sporting fixtures with their children and therefore can not attend these outings.

Many parents partake of sport themselves.

AGAINST.

Sunday are regarded by many as a day for home-work, Church and Sunday School and relaxation with the family.

Transport timetables are not entirely suitable. Difficulty would be experienced in making connections with all branches of transport.

At the next meeting may we have your ideas on this topic, please.

Annie F. Cooper  
Hon. Secretary.

Figure 1 is a line graph showing the percentage of total sample for various life stages of the European spruce sawfly across different years. The x-axis represents years from 1970 to 1990. The y-axis represents the percentage of the total sample from 0 to 100. The legend indicates: 1970 (open circle), 1971 (open square), 1972 (open triangle), 1973 (open diamond), 1974 (open inverted triangle), 1975 (open star), 1976 (open plus), 1977 (open cross), 1978 (open asterisk), 1979 (open hash), 1980 (open at), 1981 (open percent), 1982 (open dollar), 1983 (open amp), 1984 (open caret), 1985 (open underscore), 1986 (open backslash), 1987 (open pipe), 1988 (open brace), 1989 (open quote), 1990 (open apostrophe). The graph shows a significant peak in the 1970s, particularly in 1971 and 1972, followed by a decline and then a resurgence in the late 1980s and early 1990s.

1. The first part of the text discusses the importance of understanding the context of the data being analyzed. It emphasizes that without a clear understanding of the context, any analysis or interpretation of the data is likely to be flawed or misleading.

2. The second part of the text discusses the importance of using appropriate statistical methods to analyze the data. It emphasizes that different types of data require different statistical methods, and that the choice of method can have a significant impact on the results of the analysis.

3. The third part of the text discusses the importance of interpreting the results of the analysis in the context of the research question. It emphasizes that the results of the analysis should be interpreted in light of the research question and the context of the data, and that the results should be used to inform the conclusions of the study.

4. The fourth part of the text discusses the importance of communicating the results of the analysis to the relevant stakeholders. It emphasizes that the results of the analysis should be presented in a clear and concise manner, and that the results should be used to inform the decisions of the relevant stakeholders.

5. The fifth part of the text discusses the importance of ensuring the integrity of the data and the analysis. It emphasizes that the data should be collected and analyzed in a transparent and unbiased manner, and that the results of the analysis should be reported accurately and honestly.



TASMANIAN FIELD NATURALISTS' CLUB BULLETIN NO. 117.

Registered at G.P.O. Hobart for transmission by post as a periodical.

Price. 20c. p.a.

G.P.O. Box 68A  
Hobart.

JULY, 1967

President-Mrs. T.L. Stephens, 11 Hazell St., BLACKMANS BAY

Secretary-Miss A.F. Cooper, 48 Creek Rd., NEW TOWN.

Treasurer-Mr. L.E. Wall, 63 Elphinstone Rd., MOUNT STUART.

NOTICE OF MEETING

The Next meeting of the Club will be held in the Royal Society's Room, Tasmanian Museum, Hobart, on 20th July, 1967, commencing at 7.45 p.m.

Mr. J.H. Hemsley, B.Sc., Curator of Wildlife, will speak on, "State Program for Wild Life Conservation"

NEXT OUTING

Miss E. Warren will lead this outing to Geilston Bay, on 22nd July. The bus leaves for Geilston Bay, from Collins St., outside Fitzgeralds. Members are asked to meet about 10. a.m.

BIRD OBSERVATION GROUP

The next meeting of the Bird Observers Group will be held in the Wireless Institute Room, 174 Liverpool St., on 28th July, commencing at 8 p.m.

TREASURER'S NOTE

"There appears to be some uncertainty among members regarding the method of allocation of annual subscriptions.

A single adult member pays 20 cents per year for the Tasmanian Field Naturalists' Club Bulletin, 40 cents for the 'Tasmanian Naturalist' and \$1.90 for the Club's normal expenses - a total of \$2.50.

A junior member pays \$1.00 of which only 40 cents goes to the Club's general funds.

TREASURER'S NOTE continued

Only one 'Bulletin' and one 'Tasmanian Naturalist' are issued to married couples and \$2.90 of their total subscription of \$3.50 goes to general funds."

We regret that this information was mis-printed in last months 'Bulletin'.

D A N G E R

AIR YOUR SLEEPING BAG

The following excerpt from a recent issue of 'Coresearch', the C.S.I.R.O. staff journal, will speak for itself.

"A 16 year old boy died recently in a sleeping bag dry cleaned with perchlorethylene in a commercial unit.

The bag was recieved from the cleaners in a roll and put straight into the car boot. It was unrolled inside, a hike tent, and the boy slept in it for eight hours. he did not regain consciousness and was in convulsions when found. Autopsy showed death was due to the cleaning solvent.

The sleeping bog had not been properly aired and there was sufficient residual perchlorethylene to cause death. All sleeping bags need thorough airing after cleaning and again before being put into use. The filling is bulky, and removal of the final traces of solvent is a slow process.

The unaired bag is particularly dangerour in the confines of a small hike tent."

(Signed) W.J. HALLAM Safety Officer, N.S.W.

## W A T E R

So vital is water to our everyday living that man can say water means the difference between economic health or decay. Without water there would be no life here on this planet.

As a vapour, water is diffused through all the atmosphere that envelops the earth. As a liquid or solid it covers about four fifths of the earth's surface. Not satisfied with pervading the crustal rocks as soil moisture and ground-water, it locks itself up in intimate chemical combinations with other minerals and forms a substantial part of the solid rock crust and interior of the earth. All living matter, plant and animal, is largely composed of water. The earth is unique among planets of the solar system in having a favourable balance between the gaseous liquid and solid phases of its water making life as we know it possible.

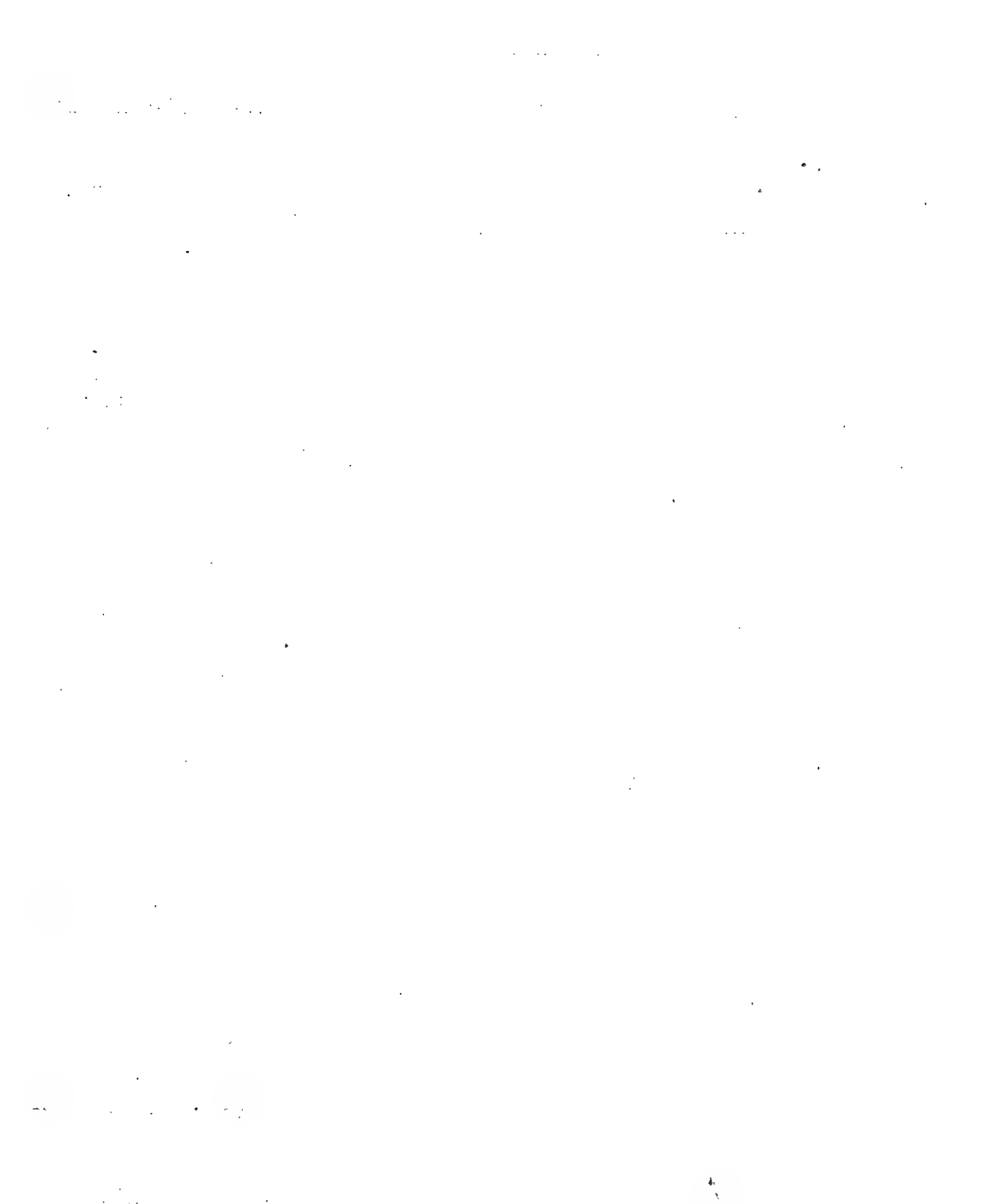
Acute shortages are in the making in many parts of the world. Water in usable form and amount is poorly distributed and often is not where needed most.

About one-fifth of all the world's fresh surface water is in the Great Lakes of North America and yet only 2,000 miles away is the "Great American Desert". Massive accumulations of ice occupy the polar regions, while humid tropics circle the earth between desert belts to the north and south. Each of the continents has at least one large desert.

What is water? The answer is quite complicated. Chemically it is composed of hydrogen, oxygen, deuterium and tritium. - the last two being so-called isotopes of hydrogen. The common formula for water  $H_2O$ , need not be rejected, but remember that water is not a single simple compound, and that it has many unusual properties. It is the only substance in earth that appears in three distinct forms of matter within the normal range of climatic conditions; solid, gas or liquid.

We will take another look at this next month.

Annie F. Cooper  
Hon. Secretary



BULLETIN of the TASMANIAN FIELD NATURALISTS' CLUB

Page 1

No. 118

Price 20c p.a.  
August, 1967

President Mrs. T. Stephens 11 Hazell St., Blackman's Bay

Secretary Miss A. Cooper Creek Road, Lenah Valley

Treasurer Mr. L. Wall 63 Elphinstone Rd., Mount Stuart

NEXT MEETING

The next meeting of the Tasmanian Field Naturalist's Club will be held in the Royal Society's Room, Tasmanian Museum, on 17th August, at 7.45 p.m.

Mr. P.A. Andrews, from the Zoology Department, Tasmanian Museum, will speak on Mammal Reproduction.

NEXT OUTING

The next outing will be led by Miss A. Cooper to Huon Falls, Glen Huon, on SUNDAY the 20th August. Private Transport will be necessary and will leave from the Prince Theatre, Macquarie St., at 10. a.m. on Sunday. Those wishing to boil the billy will be able to do so because good water is available.

Registered at the General Post Office, HOBART, for transmission by post as a periodical.

SUBSCRIPTIONS for the current year are now overdue, and no further Bulletins will be issued to unfinancial members. If you still owe yours, the amount is shown beside this paragraph and it should be forwarded as soon as possible.



CAMP SONG.

(Tune - Wandering the King's Highway)

1. We are all nature - lovers  
Seeking the open sky,  
Just a happy band of rovers,  
Cares for a while laid by.  
Not merely idly straying,  
From our tasks for a while set free;  
Call of the wild obeying,  
Higher our aims must be.

CHORUS.

2. Though we are jolly rovers,  
we have a serious side,  
Striving to instil in others  
Love of our bushland wide,  
Trying to keep forever,  
For the multitudes yet unborn,  
Forest and fur and feather,  
Moorland and lake and tarn.

CHORUS.

3. Camps alas have an ending  
But oft in the years instore  
May we list to voices blending  
Round campfires as of yore.  
Fires may sink to ashes  
But the glow from them never dies,  
Time and again in flashes  
It lives in our memories.

CHORUS FOR VERSES 1 & 2.

Field Nats are we, all of us off to camp again,  
Field Nats are we, all of us on the tramp again.  
It is great to meet once more  
Free to roam at will, free to explore.  
Field Nats are we, ornithologists, botanists, biologists and  
more,

All intent, keenly bent  
On delving into nature's lore.

Cloudy morn,  
Cheer - up don't look so forlorn,  
Skies will clear  
And the sun soon make us a brighter atmosphere.  
Downhearted we,  
Never though weather, wind or storm against us seem to be  
All the while wear a smile, and try the humorous side to see.

CHORUS FOR LAST VERSE.

Field Nats are we, all of us off to camp again,  
Field Nats are we, all of us on the tramp again.  
It is great to meet once more  
Free to roam at will, free to explore.  
Field Nats are we, orithologists, botanists, biologists  
and more,

All intent, keenly bent  
On delving into nature's lore.

Breaking camp, lets hope it won't be damp  
Stacking gear,  
That no time be lost when the lorrymen appear.  
Campsite "Farewell"  
Some future day we 'll come again  
Drawn by your magic spell  
Comes the word "All aboard", campsite once again "Farewell",  
Campsite once again "FAREWELL".

My thanks to the Club member who handed me this "Camp  
Song". If there are any more I would like to hear of them.

*Arthur H. Cooper*  
(Hon. Sec.)





THE LATE A.T.CAINES

It was with regret that we read in "The Mercury", of the passing to a higher life of Mr. A.T. Caines, on the 12th August, 1967.

Mr. Caines came to Tasmania from Broken Hill and was employed by the Electrolytic Zinc Co. of Australasia Ltd. He joined the Field Naturalists in May, 1946, and during the time I have known him he was a most interested and inspiring member.

We extend to his daughter and other members of his family, our sincere sympathy in the loss of such an intellectual person.

BIRD OBSERVERS' GROUP

A meeting of the above group will be held at the Wireless Institute Room, 117 Liverpool Street, Hobart on Friday, the 29th September, 1967 commencing at 8 p.m.

Dr. I.S. Wilson, of the University of Tasmania, will be the speaker.

Visitors welcome.

NEXT MEETING

The next meeting of the Tasmanian Field Naturalists' Club will be held in the Royal Society's Room, Tasmanian Museum, on Thursday, the 21st September, 1967, commencing at 7.45 p.m.

The guest speaker will be Mr. Tony Harrison, from the Fisheries Division, Department of Agriculture.

His subject will be "Abalone Fishing".

NEXT OUTING

The next outing will be held on Saturday, the 23rd September, 1967.

Mr. Marcus Hurburgh will lead this outing to the Coal River Valley, and those wishing to participate in this outing are asked to meet at 9.30 a.m. outside the Prince Theatre, Macquarie Street.

I am sorry that this is a short Bulletin but hope that circumstances will permit some interesting points on "Water", continuing from our July issue.

*in our next issue*

Annie F. Cooper,  
Hon. Secretary.

Page 3.

BULLETIN OF THE  
TASMANIAN FIELD NATURALISTS' CLUB  
G.P.O. BOX 68-A, HOBART, 7001.  
NO. 119

September, 1967.

Price 20c p.a.

President:-

Mrs. T.L. Stephens,  
11 Hazell St.,  
BLACKMANS BAY, TAS., 7152.

Secretary:-

Miss A.F. Cooper,  
48 Creek Rd.,  
NEW TOWN. TAS., 7008.

Treasurer:-

Mr. L.E. Wall,  
63 Elphinstone Rd.,  
NORTH HOBART, TAS., 7000.

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Tasmanian Field Naturalists' Club  
Bulletin.  
G.P.O. Box 68-A, Hobart, 7001.

Page 1.

BULLETIN OF THE  
TASMANIAN FIELD NATURALISTS' CLUB.

G.P.O. Box 68A.,  
HOBART, 7001.

NO. 120.

OCTOBER 1967.

Price 20c p.a.

President:-

Mrs. T.L. Stephens,  
11 Hazell St.,  
BLACKMAN'S BAY, 7152.

Secretary:-

Miss A.F. Cooper,  
48 Creek Rd.,  
NEW TOWN, 7008.

Treasurer:-

Mr. L.E. Wall,  
63 Elphinstone Rd.,  
NORTH HOBART, 7000.

Next Outing (See over)

(Registered at the General Post Office, Hobart, for transmission)  
(by post as a periodical.)

### NEXT MEETING.

The next meeting of the Tasmanian Field Naturalists' Club will be held in the Royal Society's Room, Tasmanian Museum, on Thursday, the 19th October, 1967, commencing at 7.45 p.m.

Mr. D.G. Thomas will be the speaker and his topic will be "Water Fowls".

### NEXT OUTING.

David Ziegeler will lead this outing to York Plains. Private transport will leave the Prince Theatre, Macquarie St., Hobart at 9 a.m. on Saturday the 21st October, 1967.

### WATER.

In our July, 1967 issue we took a look at "Water" a subject very much in the news at the moment, let us have a further look at this necessary liquid.

We all know that when water freezes it expands and therefore ice is lighter than water hence the surface of lakes and rivers freeze from the top down thus preventing life therein dying, providing that the freeze is not very intense.

The heat capacity of water is second only to ammonia, thus enabling the oceans to be reservoirs of solar warmth controlling our weather from great extremes.

We know that this earth of ours, in the beginning was a molten mass and radiated heat into space. In space were gases and vapours which contained the essential ingredients of water. As the earth cooled and chemical changes proceeded water was formed.

Water circulates from land to the oceans, to the atmosphere, and back, and this cycle is known as "The Hydrological Cycle".

In ancient times the inhabitants of the then fertile regions, learnt the art of conserving water, by means of open reservoirs, supplemented by well-planned irrigation terracing and tree planting.

Few major areas have no water problem and some places are in serious trouble. There isn't less water than there used to be, but there is more call on the supply.

It is estimated that by the year 2,000 the population of this planet will double the present estimate of 3,000 million.

At this stage I would like to print a table from the 4th Report of the Metropolitan Water Board for the Year Ended 30th June, 1966.

"The table below includes all trade use, civic purposes, golf courses and the like.

CONSUMPTION AND DEMAND.

	<u>Population.</u>			<u>Gals per head per day.</u>
Hobart	153,000	2,555	Million Gals	132
Glenorchy	39,000	2,577	do do	181
Clarence	27,000	825	do do	83
Taroona	3,300	90	do do	75
Kingston Beach	3,500	105	do do	82
Sorell Extension	2,300	123	do do	153

The highest weekly consumption was 204 million gallons for week ending 1st February, 1966, that is an overall average for the metropolitan area of 230 gallons per head per day!!!!

During a twelve week period from 28th December, 1965 to 29th March, 1966, the average daily demands were:-

Hobart	8.3	Million Gals	-	157	Gals per head per day
Glenorchy	8.1	do do	-	207	do do do do do
Clarence	3.8	do do	-	140	do do do do do

These figures show an overall increase of 12% for a similar period last year."

Annie F. Cooper  
Hon. Secretary.





TASMANIAN FIELD NATURALISTS' CLUB'S BULLETIN NO. 121.

G.P.O. Box 68 A., HOBART, 7001.

PRICE. 40¢

NOVEMBER, 1967.

President:-

Mrs. T. L. Stephens,  
11 Hazell St.,  
BLACKMAN'S BAY, 7152.

Secretary:-

Miss. A.F. Cooper,  
48 Creek Rd.,  
NEW TOWN, 7008.

Treasurer:-

Mr. L.E. Wall,  
63 Elphinstone Rd.,  
NORTH HOBART, 7000.

Next. Meeting.

The next meeting to be held on the 16th November, 1967 in the Royal Society's Room, Tasmanian Museum, Hobart commencing at 7.45 p.m.

Mr. Lynch will speak on Tasmanian Fresh Water Fish and Their Enviroment.

Next Outing.

This will be in the form of a day and evening outing <sup>to</sup> Primros Sands and Mr. K. Aves will be the leader.

Private transport will leave the Prince Theatre at 9.30 a.m. on the 19th November, 1967, and the return will be made at a time convenient to each person. It is hoped to have a barbeque in the evening.

Bird Observers' Group.

The next meeting of the above will be held at the Wireless Institute Room, 147 Liverpool St., Hobart, on Friday the 24th November, 1967 at 8 p.m.

Subject for the evening - R.A.O.U. Field Outing to the Northern Territory, June, 1967 - Illustrated.

New Birds.

We hope members saw the newspaper report of the two new records recently - the Buff-breasted Sandpiper and the Wood Sandpiper.

The Buff-breasted Sandpiper was first seen in Australia in 1962, but there have been a number of more recent sightings in 1965 and 1966.

Long Week-end 27-29 January, 1968.

It has been suggested that a camp be held at "Okehampton", via Triabunna.

This will be discussed at the November, 1967 meeting.

J U N I O R P R I Z E.

This is open to a junior member (under the age of 16 years at the end of the current year) showing the most interest in Natural History.

This is to be a written exercise which will be judged by a well known person in the Natural History field.

Entries close on the 31st. December, 1967, and are to be posted to the Secretary G.P.O. Box 68 A., Hobart, 7001.

Any further details may be obtained from the Office Bearers on the face of this Bulletin, or any Committee Member.

Hobart Walking Club Boat Trip.

A proposed week-end boat trip to Frederick Henry and Norfolk Bays by the "Cartela" is being planned for the 30-31st March, 1968.

If possible, the party will land at Saltwater River and camp there overnight; otherwise the boat will serve as a dormitory.

Under suitable conditions, Slopen Island might be visited.

The total cost would be shared by starters, with a reduced rate for children.

For a party of 60, the adult contribution would be about \$4.00.

Further information is available from Arthur Knight 'phone 43 8324.

Closure.

Well friends, this is our last Bulletin for 1967, and in concluding this document and the Club's year I would like to say "Thanks" to all who have helped me carry this position of Hon. Secretary. I will not mentioned any one in particular, because so many of you have helped in many ways. I trust that you will give the same co-operation to your next Hon. Sec.

I, on your behalf, would like to thank our Office Bearers and Committee for the hard work they have done to keep this Club active over the past year, and I know they look for your support and help in 1968.

We need TWELVE members to carry on the good work next year, what about you?????. Please give this some thought.

From your Office Bearers and Committee we wish you a safe, happy and peaceful Christmas and aprosperous 1968.

Annie F. Cooper,  
(Hon. Secretary).

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